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June 5, 2003

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: D.T.E. 03-47, Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company, NSTAR Gas Company, Pension/PBOP Adjustment Mechanism Tariff Filing

Dear Secretary Cottrell:

Enclosed for filing in the above-referenced matter are the responses of Boston Edison Company, Cambridge Electric Light Company, Commonwealth Electric Company and NSTAR Gas Company to the Information Requests set forth on the accompanying list.

Thank you for your attention to this matter.

Sincerely,

Robert N. Werlin

Rolet D. Weli/ful

Enclosures

cc: Service List

Responses to Information Requests

Information Request DTE-2-1 Information Request DTE-2-2 Information Request DTE-2-3 Information Request DTE-2-4 Information Request DTE-2-5 Information Request DTE-2-6 Information Request DTE-2-7 Information Request DTE-2-9 Information Request DTE-2-10 Information Request DTE-2-11 Information Request DTE-2-12 Information Request DTE-2-13 Information Request DTE-2-16 Information Request DTE-2-18 Information Request DTE-2-20 Information Request DTE-2-23

D.T.E. 03-47

Information Request: **DTE-2-1**

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-1

Please refer to Exh. NSTAR-JJJ-1(A) at 2. Do the Companies have any alternative course of action to avoid a negative earnings impacts because of the under-collection of pension and PBOP costs?

Response

NSTAR believes that its only alternative would be to file a full base rate case for each of its four retail subsidiaries every year that there is a significant undercollection of pension and PBOP costs. Clearly, this would require a much higher expenditure of resources on the part of the Company, the Department and participants than what would be required if the more limited annual adjustments filed in concert with the electric companies' annual reconciliation filing. It should be noted that the Company's proposal would also avoid negative impacts on customers by requiring timely rate reductions and reconciliations when the situation reverses. While the recurring rate-case alternative would theoretically help the Company avoid negative earnings impacts, it would not permit NSTAR to avoid the charge to equity as a result of the additional minimum liability. The alternative actions available to the Company are severely limited because of the requirements of Generally Accepted Accounting Practices ("GAAP"), specifically the application of SFAS 87/106, in combination with the guidance of SFAS 71 "Accounting for the Effects of Certain Types of Regulation".

D.T.E. 03-47

Information Request: DTE-2-2

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-2

Refer to Exh. NSTAR-JJJ-1(A) at 17. Please detail how the projected contributions to both the Companies' pension and PBOP plans for the years 2004 through 2013 were developed.

Response

Page 17 of Exhibit NSTAR-JJJ states that NSTAR's projections "assume that investment results return to a more stable level and that interest rates increase from the current historically low levels." The projection of contributions includes an assumption that the expected long-term return on assets will be 9 percent (8.4 percent after plan expenses). The assumption for discount rates is as follows:

2003	6.50 percent
2004	7.00 percent
2005-2007	7.25 percent
2008-2011	7.50 percent
2012-2013	7.75 percent.

D.T.E. 03-47

Information Request: DTE-2-3

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-3

If the Companies' proposal is approved, will the Companies be in compliance with the 15 percent rate reduction required by the Restructuring Act?¹ If so, how?

Response

The Companies will continue to comply with the 15 percent reduction applicable for electric companies by designing electric rates in the same manner as they presently do when reconciling their annual transition costs. Each year, Boston Edison, Cambridge and Commonwealth file for new rates to be effective on January 1st, for Transition Charges, Transmission Service and Standard Offer Service. Similarly, the Companies would implement a new PAF component on January 1st. If the total of the applicable average company rate components, including the PAF, would not achieve the 15 percent reduction from the inflation-adjusted pre-retail access date total average rate, that electric company would reduce other rate elements, e.g., Default Service Adjustment Charge, Transition Charge, to achieve the required reduction.

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[&]quot;An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Enhanced Consumer Protection Therein," St. 1997, c. 164.

D.T.E. 03-47

Information Request: DTE-2-4

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-4

Refer to Exh. NSTAR-JJJ-1(A) at 31. Please supply the actual cash contributions by year to both the pension fund and PBOP plans for the ten year period prior to the year 2001. Additionally, submit for the same period of time the amount the Company was recovering through base rates for pension and PBOP. When appropriate this response should be broken out by company, that is Boston Edison Company, Boston Gas Company [sic], Cambridge Electric Light Company and Commonwealth Electric Company.

Response

Please refer to the Attachment DTE-1-2(Rev) for the requested data covering the ten-year period 1993 – 2002. The actual cash contributions appear on lines 7 and 17 for pension and PBOP, respectively. The amounts recovered through base rates appear on lines 10 and 20 for pension and PBOP, respectively. These amounts are broken out for the NSTAR retail companies on pages 2 – 5 of that attachment. It should be noted that the pension plan was merged for all NSTAR companies in 2000 and similarly the PBOP plan was merged in 2001. Plan contributions for the individual retail companies since those dates represent an allocation of the NSTAR total.

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D.T.E. 03-47

Information Request: DTE-2-5

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-5

Please refer to Exh. NSTAR-JJJ-1(A) at 31. What amount of the Company's estimated \$102 million three-year cash contribution for the years 2001 through 2003 is actual cash contributions and what amount is forecasted?

Response

The amounts for 2001 and 2002 are actual cash contributions of \$100.7 million and \$88.0 million, respectively. The contribution for 2003 is forecast at \$118.5 million, of which \$78.9 million has been contributed as of May 31, 2003.

D.T.E. 03-47

Information Request: **DTE-2-6**

June 5, 2003

Person Responsible: James J. Judge

Page 1 of 1

<u>Information Request DTE-2-6</u>

Please refer to Exh. NSTAR-JJJ-1(A) at 31. Will the estimated \$40 million Average Differential Amount vary with the level of FASB expense booked for accounting purposes. If so, when will this amount change?

Response

Yes, the Average Differential Amount does vary slightly with the level of FASB expense booked for accounting purposes.

Please refer to the Company's response to Information Request DTE-1-4(Rev) for an illustration of how the Average Differential Amount is calculated. The Pension and PBOP contributions for the years 2001 - 2003, which will not change, are averaged on lines 1 - 4 of that exhibit.

Pension and PBOP expense currently in rates, shown on line 5, is deducted from the average contributions to arrive at the Average Differential Amount shown on line 6. The amount of Pension and PBOP currently in rates for the electric companies after the retail access date is collected on an unbundled basis for transmission and distribution. Under the terms of the Companies' transmission tariffs, transmission customers (retail and wholesale) are charged a portion of the actual 926 account expense in a given year based on a labor allocator that varies for each electric company. Thus, the amount currently in rates will change slightly for the electric companies each year but not for NSTAR Gas.

D.T.E. 03-47

Information Request: DTE-2-7

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-7

Refer to Exh. NSTAR-JJJ-1(A) at 31. Who determines the amount the Company is required to book in any year pursuant to FASB. Please provide actuarial estimates for the most recent determination of the FAS 87.

Response

NSTAR utilizes the firm of Watson Wyatt Worldwide ("WW") as its actuary for the purpose of determining its annual SFAS 87 cost. The discount rate and expected long-term investment return assumptions that WW utilizes in its determination are provided to WW by NSTAR's Accounting Department. The discount rate is based on rates on high-quality fixed-income investments that are expected to be available through the maturity dates of the pension benefits. The expected long-term investment return is the assumed average return based on the asset mix of the plans' investments over the duration of the plans' liabilities. Both of these assumptions are reviewed with the actuary and independent auditors each year and reflect current market conditions.

See the Attachment DTE-2-7, the SFAS 87 valuation report for NSTAR for 2003.

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D.T.E.	03-47
Att. D	ГЕ-2-7

Actuarial Valuation Report

NSTAR Pension Plan

Pension Expense—01/01/2003

April, 2003

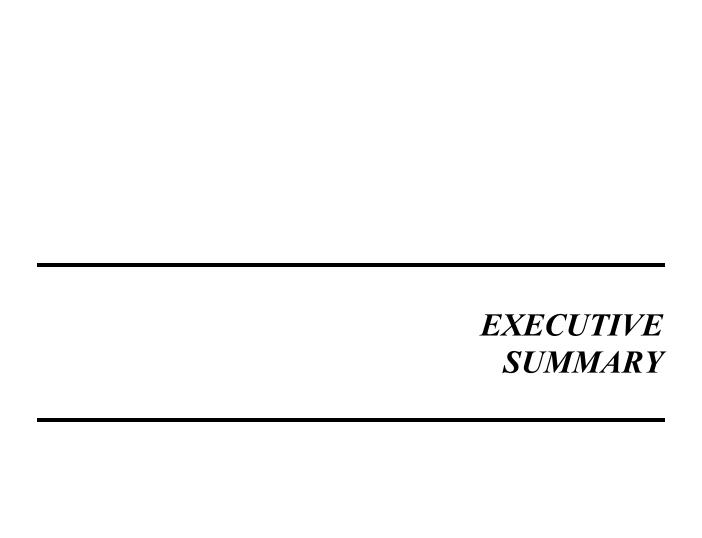
WWW.WATSONWYATT.COM

Actuarial Valuation for Purposes of FASB Statement 87 for the Fiscal Year Beginning January 1, 2003

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SUMMARY OF KEY RESULTS

As requested by NSTAR, this report presents the results of the actuarial valuation of the NSTAR Pension Plan for purposes of FASB Statement 87 as amended by FASB Statement 132. In addition, the report documents the funded status of the plan, the provisions on which the valuation is based, and the actuarial assumptions and methods used in the calculations.

Fiscal Years Beginning:		01/01/2003	01/01/2002	
Annual Expense	Net Periodic Benefit Cost/(Income) Percentage of compensation	\$47,233,000 24.1%	\$11,198,000 5.9%	
Prior Year's Disclosed Funded	Projected Benefit Obligation Fair Value of Assets Funded Status	(\$917,492,000) 665,897,000 (251,595,000)	(\$810,517,000) 790,704,000 (19,813,000)	
Status	Prepaid Benefit Cost/(Accrued Benefit Liability) Intangible Asset Other Comprehensive Income	(\$177,675,000) \$980,000 \$433,711,000	\$218,714,000 N/A N/A	
Participant Information	Participating Employees Participant Compensation Deferred Vested Participants Retirees and Beneficiaries Retiree and Beneficiary Annual	3,084 \$196,144,000 914 3,241	3,115 \$189,639,000 1,227 3,275	
	Benefit Payments Total Plan Participants	\$46,339,000 7,239	\$47,850,000 7,617	

REVIEW OF CHANGES SINCE LAST YEAR

Plan Provisions

Appendix B summarizes the main provisions of the plan as of the valuation date. The plan was amended as of January 1, 2003 to update the mortality assumption used to convert PEP single sums to annuities for future management retirees and to convert annuities to lump sums for future represented retirees. The mortality table outlined in Revenue Ruling 2001-62 (based on the 1994 Group Annuity Reserving Table for males and females) is used for these purposes beginning in 2003. This change increased plan liabilities by approximately \$671,000.

To our knowledge, no additional changes are pending. To the best of our knowledge, no significant events requiring recognition under SFAS 88 occurred during 2002.

Assumptions

Appendix A summarizes the actuarial assumptions and cost methods used to determine plan liabilities. A comparison of assumptions for the current and prior years is shown below.

Fiscal Years Beginning:	01/01/2003	01/01/2002	
Assumptions for Expense			
Discount rate	6.500%	7.250%	
Expected long-term return on assets	9.000%	10.000%	
Compensation increase rate	S-3 Table +1%	S-3 Table +1%	

The mortality table used to measure the plan's liabilities was changed from the 1994 Uninsured Pensioner's Table to the 1994 Group Annuity Reserving Table for males and females. Mortality rates are adjusted by 80% for management participants and 120% for represented participants. In addition, the interest rate used to estimate lump sum anmounts payable to future represented retirees decreased from 6.75% to 6.00%. These changes served to increase plan liabilities by \$17,716,000.

In addition, pensionable compensation for management employees for this valuation was increased for projection purposes to reflect the assumption that bonuses paid in future years will exceed those paid from July 1, 2001 through June 30, 2002. It is assumed that management employees will receive bonuses equal to (on average) 10% of base salary in future years. This percentage was derived using the percentage of plan compensation due to bonuses paid for the 2002 plan year.

REVIEW OF CHANGES SINCE LAST YEAR (cont.)

Plan Experience

The experience loss/(gain), not due to plan, assumption or method changes during the prior year was \$178,813,000 for FAS expense purposes. The components of this loss/(gain) are \$196,004,000 due to investment results and (\$17,191,000) from sources related to plan liabilities.

ANNUAL EXPENSE

The net periodic benefit cost (income statement expense) was determined in accordance with Statement of Financial Accounting Standards 87 (SFAS 87) for the year beginning January 1, 2003. For the fiscal year beginning in 2003, this amount is \$47,233,000, which compares with an expense of \$11,198,000 for the prior fiscal year.

Changes In Benefit Expense/	The table below shows the principal reasons for the change expense from last year to this year.	01 φ30,033,000 III
(Income)	Annual Expense/(Income) for Fiscal Year Beginning in 2002 Changes in SFAS 87 Expense Due to:	\$11,198,000
	• Investment Losses/(Gains)	32,883,000
	• Liability Losses/(Gains)	(2,561,000)
	 Changes in Assumptions 	12,443,000
	• Plan Changes	97,000
	 Additional Sponsor Contributions 	(2,745,000)
	Anticipated Normal Plan Progression	(4,082,000)
	Annual Expense/(Income) for Fiscal Year Beginning in 2003	\$47,233,000
Assumptions	Discount rate Compensation increase rate Expected long-term return on assets	6.500% S-3 Table + 1% 9.000%

SFAS 87 FUNDED STATUS

The Financial Accounting Standards Board requires disclosure of the plan's funded status as well as a statement of the prepaid benefit cost/(accrued benefit liability) along with any intangible asset recognized due to an unfunded accumulated benefit obligation. The table below summarizes the plan's current funded status as of the end of the fiscal year, December 31, 2002, along with comparable information as remeasured on January 1, 2003, with a new census.

Fiscal Years Ending:		12/31/2003	12/31/2002
		Remeasured as of beginning of fiscal year	Disclosed at end of fiscal year
Funded Status	Projected Benefit Obligation Fair Value of Assets Funded Status Accumulated Benefit Obligation ABO Funded Ratio	\$900,301,000 665,777,000 (234,524,000) 822,007,000 81.0%	\$917,492,000 665,897,000 (251,595,000) 843,572,000 78.9%
Balance Sheet Entries	Prepaid Benefit Cost Accrued Benefit Liability Intangible Asset Accumulated Other Comprehensive Income Adjustments		N/A (\$177,675,000) \$980,000 \$433,711,000
Assumptions	Discount rate Compensation increase rate	6.500% S-3 Table + 1%	6.500% S-3 Table + 1%

ACTUARIAL STATEMENT

Primary Purposes of Actuarial Valuation

As requested by NSTAR, this report presents the results of the actuarial valuation of the NSTAR Pension Plan for purposes of FASB Statement 87 as amended by FASB Statement 132. The primary purpose of the valuation is to disclose the Net Periodic Benefit Cost under Financial Accounting Standards. The report also documents the provisions on which the valuation is based and the actuarial assumptions and methods used in the calculations. The use of this report for anything other than this purpose may be inappropriate and misleading.

Sources of Data

Employee data as of January 1, 2003 was provided by NSTAR's benefits outsourcing vendor and trustee. We have relied on all the data and information provided, including plan provisions and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for reasonableness. Asset data was provided by the plan trustee.

Actuarial Calculations

The valuation summarized in this report involves actuarial calculations that require the making of assumptions about future events. We believe that the assumptions and methods used in this report are reasonable and appropriate for the purpose for which they have been used. However, other assumptions and methods could also be reasonable and could result in materially different results. Because actuarial calculations are based on many assumptions, they are inherently imprecise. In addition, because it is not possible or practical to consider every possible contingency, we may use summary information, estimates or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that we deem to be immaterial.

ACTUARIAL STATEMENT (cont.)

Certification of Compliance and Independence

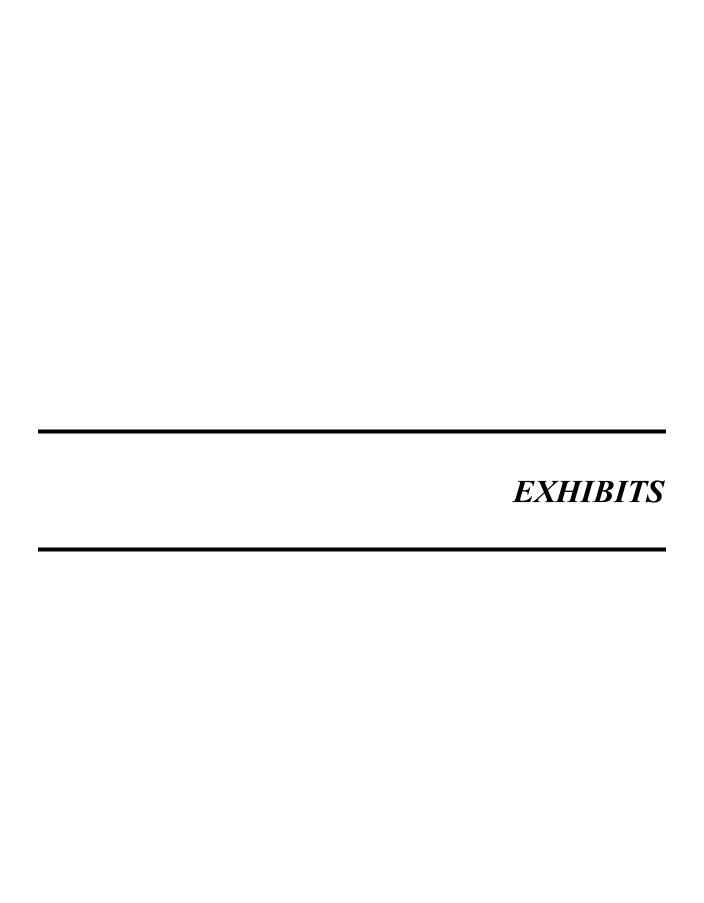
The undersigned consultants of Watson Wyatt Worldwide with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. To the best of our knowledge, all plan participants on January 1, 2003, and all plan provisions have been reflected in the valuation. In our opinion, all calculations and procedures are in conformity with generally accepted actuarial principles and practices; and the results presented comply with the requirements of the Statements of Financial Accounting Standards including modifications made by Statements 130 and 132. There is no relationship between NSTAR and Watson Wyatt Worldwide that impacts our objectivity. NSTAR is responsible for the selection of assumptions for SFAS 87 purposes.

We will be pleased to review this report with you at your convenience.

Sincerely,

Christopher B. Johnson Enrolled Actuary

Ann T. Kampe Fellow, Society of Actuaries



1. FUNDED STATUS AND ACCRUED BENEFIT COST

Fiscal Years Ending:		12/31/2003	12/31/2002	
Reconciliation of Funded Status		For NPBC development remeasured on	Balance sheet disclosure as of	
	a. Measurement date	12/31/2002	12/31/2002	
	b. Accumulated benefit obligation	(\$822,007,000)	(\$843,572,000)	
	c. Projected benefit obligation	(\$900,301,000)	(\$917,492,000)	
	d. Plan assets at fair value	665,777,000	665,897,000	
	e. Funded status	(\$234,524,000)	(\$251,595,000)	
	f. Unrecognized net loss/(gain)	498,788,000	515,859,000	
	g. Unrecognized prior service costs	(8,228,000)	(8,228,000)	
	h. Unrecognized net transition			
	obligation/(asset)	980,000	980,000	
	i. Prepaid/(accrued) benefit cost	\$257,016,000	\$257,016,000	
	j. (Additional minimum liability)		(434,691,000)	
	k. Prepaid benefit cost/(accrued benefit liability)		(\$177,675,000)	
	 Intangible asset 		980,000	
	m. Accumulated other comprehensive			
	income adjustments		433,711,000	
	n. Net amount recognized		\$257,016,000	
Assumptions	o. Discount rate	6.500%	6.500%	
-	p. Compensation increase rate	S-3 Table + 1%	S-3 Table + 1%	

2. SUMMARY AND COMPARISON OF EXPENSE

Fiscal Years I	Beginning:	01/01/2003	01/01/2002	
Basis of Calculations a. Measurement date b. Service cost c. Projected benefit obligation d. Fair value of assets e. Market-related value of assets		12/31/2002 \$17,615,000 900,301,000 665,777,000 665,777,000	12/31/2001 \$14,871,000 821,708,000 790,704,000 790,704,000	
Net Periodic Benefit Cost	 f. Service cost g. Interest cost h. Expected return on assets i. Net (gain)/loss recognition j. Prior service cost amortization k. Transition (asset)/obligation recognition l. Net periodic benefit cost/(income) 	\$21,535,000 56,727,000 (62,837,000) 32,017,000 (810,000) 601,000 \$47,233,000	\$14,871,000 57,564,000 (74,426,000) 13,451,000 (863,000) 601,000 \$11,198,000	
Assumptions	m. Discount raten. Expected long-term return on assetso. Compensation increase rate	6.500% 9.000% S-3 Table + 1%	7.250% 10.000% S-3 Table + 1%	

3. DEVELOPMENT OF EXPENSE COMPONENTS

Fiscal Year Begi	nning:	01/01/2003
Service Cost	 a. Service cost at beginning of year b. Interest on service cost at discount rate (6.500%) c. Expected administrative expenses d. Total 	\$16,540,000 1,075,000 3,920,000 \$21,535,000
Projected Benefit Obligation	e. Participating employeesf. Deferred vestedg. Retirees and beneficiariesh. Total	\$378,519,000 76,173,000 445,609,000 \$900,301,000
Interest Cost	 i. Projected benefit obligation j. Expected benefit payments during year k. Interest on time-weighted amounts at discount rate (6.500%) 	\$900,301,000 (55,177,000) \$56,727,000
Market-Related Value of Assets	l. Fair value of assets as of 01/01/2003m. Market-related value of assets	\$665,777,000 \$665,777,000
Expected Return on Assets	 n. Market-related value of assets o. Expected contributions during fiscal year p. Expected benefit payments q. Expected rate of return r. Expected return on assets adjusted for timing of above contributions and payments 	\$665,777,000 80,000,000 (55,177,000) 9.000% \$62,837,000

4. RECONCILIATION OF ACCRUED BENEFIT COST AND OF UNRECOGNIZED BALANCES

Reconciliation of Prepaid/(Accrued)	a. Prepaid/(accrued) as of 01/01/2002	benefit cost	\$218,714,000
Benefit Cost	b. Net periodic benef ending 12/31/2002	Net periodic benefit cost/(income) for fiscal year	
	c. Employer contribu	tions paid during fiscal year	11,198,000
	ending 12/31/2002 d. Prepaid/(accrued)		49,500,000
	as of 01/01/2003 (a		\$257,016,000
	`	it cost/(income) for fiscal year	\$237,010,000
	ending 12/31/2003		47,233,000
	•	er contributions paid	.,,
	during fiscal year	ending 12/31/2003	80,000,000
		(accrued) benefit cost	
	as of 01/01/2004 (d	d - e + f)	\$289,783,000
Reconciliation	Unrecognized	Unrecognized	
of Transition	Amount as of	Amount as of	Amortization
Obligation/	01/01/2002	01/01/2003	Amount
(Asset)			
	\$1,581,000	\$980,000	\$601,000
Reconciliation of	Unrecognized	Unrecognized	
Prior Service Costs	Amount as of	Amount as of	Amortization
The service costs	01/01/2002	01/01/2003	Amount
	(\$5,304,000)	(\$4,809,000)	(\$495,000)
	(\$4,458,000)	(\$4,090,000)	(\$368,000)
	N/A	671,000	53,000
Total	(\$9,762,000)	(\$8,228,000)	(\$810,000)

5. AMORTIZATION OF UNRECOGNIZED NET (GAIN)/LOSS

Fiscal Year Beginning:		01/01/2003
Total Unrecognized	a. Total unrecognized (gain)/lossb. Deferred (gain)/loss	\$498,788,000
(Gain)/Loss	i. Market-related value of assets	\$665,777,000
Adjusted for Deferred Asset	ii. Fair value of assetsiii. Deferred (gain)/loss (i-ii)	665,777,000
(Gain)/Loss	c. Unrecognized (gain)/loss adjusted for deferred	\$0
	asset (gain)/loss (a-b)	\$498,788,000
Amortization	d. Absolute value of adjusted unrecognized (gain)/loss	\$498,788,000
of Unrecognized	e. Projected benefit obligation	900,301,000
Net (Gain)/Loss	f. Market-related value of assets	665,777,000
	g. Larger of e and f	900,301,000
	h. 10% of g	90,030,100
	i. Absolute value of (gain)/loss in excess of 10% corridor (d-h, not less than zero)j. Unrecognized (gain)/loss subject to amortization	\$408,757,900
	with sign from c	\$408,757,900
	k. Average future expected working lifetime	•
	of participants expected to receive benefits	12.767 years
	1. Amortization amount $(j \div k)$	\$32,017,000
	k. Average future expected working lifetime of participants expected to receive benefits	12.767 y

6. CHANGE IN PLAN ASSETS DURING FISCAL YEAR

		Fair Market Value
Change in Assets	 a. Plan assets as of 01/01/2002 b. Employer contributions c. Employee contributions d. Benefit payments made e. Administrative expenses paid from trust f. Investment return g. Plan assets as of 01/01/2003 	\$790,704,000 49,500,000 73,000 (67,973,000) (3,563,000) (102,964,000) \$665,777,000
Return on Assets	h. Rate of return on average invested assets	(13.18)%

7. HISTORICAL INFORMATION

Fiscal Years Beginning:	01/01/2003	01/01/2002	01/01/2001	01/01/2000
Participant Data				
Participating employees	3,084	3,115	3,070	3,434
Participant compensation Deferred vested	\$196,144,000	\$189,640,000	\$183,804,000	\$201,466,000
participants	914	1,227	1,302	1,499
Retirees and beneficiaries	3,241	3,275	3,558	3,505
Retiree and beneficiary	,	,	ŕ	,
annual benefit payments	\$46,339,000	\$47,850,000	\$47,220,000	\$47,047,000
Total plan participants	7,239	7,617	7,930	8,438
Asset History	.			
Fair value	\$665,777,000	\$790,704,000	\$847,234,000	\$955,253,000
Benefit payments in prior year	67,973,000	64,081,000	123,281,000	134,698,000
Employer contributions in prior year	49,500,000	61,000,000	41,950,000	61,965,000
SFAS 87 Expense				
Annual expense	\$47,233,000	\$11,198,000	(\$7,824,000)	(\$12,663,000)
Prior Year SFAS 87 Disclosure Prepaid/(accrued)				
benefit cost	257,016,000	218,714,000	149,890,000	104,900,000

8. SUMMARY OF PLAN PARTICIPANTS

As of:			01/01/2003	01/01/2002
Participating	Number		3,084	3,115
Employees	Total plan compensation		\$196,144,367	\$189,639,098
	Average plan compensat	ion	\$63,601	\$60,879
	Average age		46.6	46.0
	Average credited service	;	18.7	18.4
Retirees and	Number		3,241	3,275
Beneficiaries	Total annual pension		\$46,339,029	\$47,849,819
	Average annual pension		\$14,298	\$14,611
Distribution	Age Last Birthday	Number	Annual Pension	
as of	Under 55	155	\$493,069	
01/01/2003	55 - 59	296	7,092,221	
	60 - 64	444	10,032,857	
	65 - 69	503	7,586,506	
	70 - 74	685	9,593,767	
	75 – 79	534	6,831,616	
	80 - 84	353	3,205,944	
	85 and Over	271	1,503,049	
Participants	Number		914	1,227
with Deferred	Total annual pension		\$12,634,277	\$16,863,192
Pensions	Average annual pension		\$13,823	\$13,743
Distribution	Age Last Birthday	Number	Annual Pension	
as of	Under 40	96	\$712,190	
01/01/2003	40 - 44	183	1,690,011	
	45 - 49	179	2,240,361	
	50 - 54	252	4,903,946	
	55 - 59	149	2,677,651	
	60 - 64	46	394,134	
	65 and Over	9	15,984	

9. AGE AND SERVICE DISTRIBUTION

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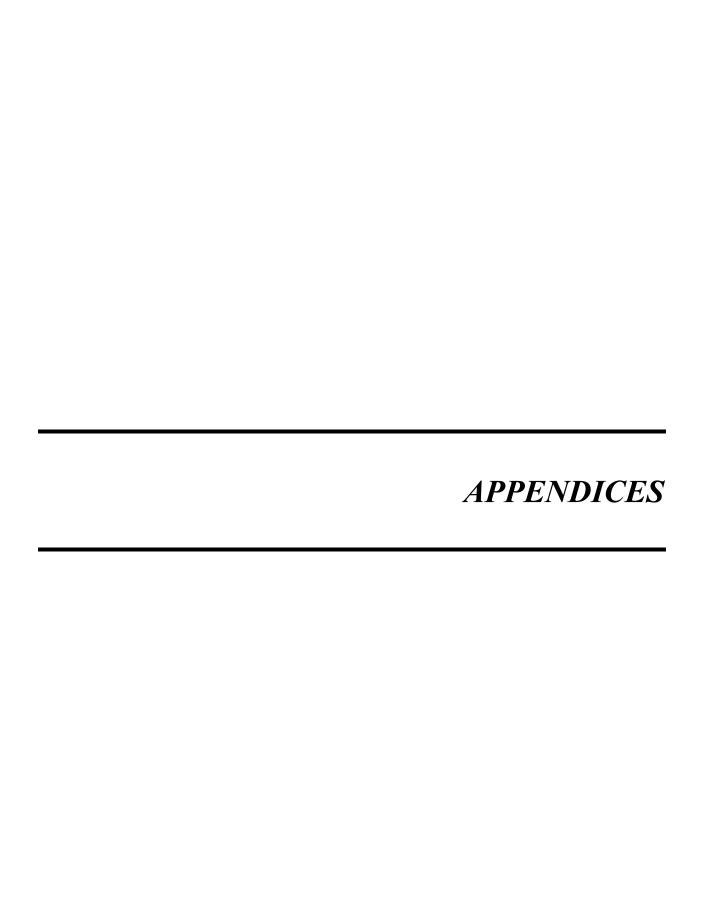
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RECONCILIATION OF PARTICIPANT DATA

9.

·	Participating Employees	Vested Terminated Participants	Participants Receiving Benefits	Total
	(1)	(2)	(3)	(4)
Number as of 01/01/2002	3,115	1,227	3,275	7,617
ations	(89)	0	0	(89)
	(20)	20	0	0
	(35)	(253)	0	(288)
	(41)	(11)	52	0
payable and adjustments	0	(17)	(102)	(119)
rehires				
	133	(52)	16	67
ļ	3,084	914	3,241	7,239

Including disabilities and deaths in service with benefits payable.



Plan Sponsor	NSTAR	
Interest Rates	Discount rate 6.50% Expected long-term return on assets 9.00%	
Compensation Increases	Based on S-3 Relative Salary Scale Factors from the Actuary's Pension Handbook by Crocker, Sarason, and Straight, increased by 1.0% at each age. Sample rates shown below:	
	Age 25 7.6620% 30 6.7682% 40 5.3860% 50 4.7458% 60 2.3450% It is assumed that management employees will receive, on average, bonuses in future years equal to approximately 10% of July 1, 2002 base salary.	
Future Increases in Maximum Benefits and Plan Compensation Limitations	It is assumed that maximum benefit and plan compensation limitations under the Internal Revenue Code will increase 4.0% compounded annually in the future.	
Wage Base Increases	4.50% compounded annually.	
Expenses	110% of prior year's expenses are added to the service cost component of the annual expense/(income). The amount included this year for expenses is \$3,920,000.	

Mortality for Healthy Lives

The 1994 Group Annuity Reserving Table with separate rates for males and females (rates multiplied by .8 for management employees and by 1.2 for union employees).

Mortality for Disabled Lives

1965 RRP Totally Disabled Ultimate Mortality Table.

Retirement

All NSTAR employees are assumed to retire according to the following rates:

Age	Percent Retiring
55-59	1%
60	5%
61	5%
62	30%
63	15%
64	10%
65	100%

Management employees who terminate after January 1, 2000 are assumed to retire at age 65 or the valuation date, if later.

Represented employees who terminate prior to retirement and management employees who terminated before January 1, 2000 from Boston Edison are assumed to retire at age 55 or the valuation date if later. Management employees who terminated from Commonwealth Energy before January 1, 2000 and represented employees entitled to benefits under Appendix B3 are assumed to retire at the earlier of age 55 with age plus service of 75 and age 65, or the valuation date if later.

Disability Rates

1974 United Auto Workers Male and Female Tables. Sample rates are:

<u>Age</u>	Male Rate	Female Rate
30	.3%	.4%
40	.4%	.6%
50	.5%	.8%
60	.8%	1.3%

Representative Termination Percentages

Termination percentages for employees with fewer than ten years of service are shown below:

Years of Service	Percent Terminating
0	21%
1	21%
2	13%
3	13%
4	13%
5	10%
6	10%
7	8%
8	8%
9	5%

Termination rates during the period after completion of ten years of service are shown below:

Age Group	Percent Terminating
30-39	5%
40-49	3%
50-54	1%
55-62	0%

Form of Payment	80% of participants who retire or terminate employment are assumed to elect a lump sum benefit where available. 100% of beneficiaries of
	management employees who terminate due to death are assumed to elect a lump sum benefit. Former Commonwealth Energy Plan management participants are assumed to elect an annuity at retirement if:

- The Rule of 75 is applicable, and
- The present value of the annuity based on the blended 1994 Group Annuity Reserving Table projected to 2002 of Rev. Rul. 2001-62 (Code Section 417(e) mortality basis) and 6.0% interest exceeds the pension credits times Final Average Pay formula.

The present value of the annuity for lump sum determinations is based on the blended 1994 Group Annuity Reserving Table projected to 2002 (Code Section 417(e) mortality basis) and 6.00% interest. Marriage 75% are assumed married, with males assumed to be 3 years older than their spouses.

It is assumed that there will be no new or rehired employees. Inclusion Date The valuation date coincident with or next following the date on which the employee becomes a participant.

Cost Method

As required by SFAS No. 87, the Projected Unit Credit Cost Method is used to determine the normal cost and the projected benefit obligation for retirement, termination, and ancillary benefits. Under this method, a "projected accrued benefit" is calculated as of the beginning of the year and as of the end of the year for each benefit that may be payable in the future. The "projected accrued benefit" is based on the plan's accrual formula and upon service as of the beginning or end of the year. The actuarial accrued liability is the present value of the "projected accrued benefits" as of the beginning of the year for employed participants and is the present value of all benefits for other participants. The normal cost is the present value of the difference between the "projected accrued benefits" as of the beginning and end of the year. The normal cost and actuarial accrued liability for the plan are the sums of the individually computed normal costs and actuarial accrued liabilities for all plan participants.

Market-Related Value of Assets

Market value of plan assets is used for the determination of annual expense.

Participant Data

All valuation data was supplied on diskette or other electronic format as of the valuation date.

Measurement Date/ Valuation Date

The measurement date is January 1, 2003.

APPENDIX A - STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS (cont.)

Amortization of Unrecognized Net Gain or Loss

For determining annual expense amortization of unrecognized net gain or loss resulting from experience different from that assumed and from changes in assumptions is included as a component of net periodic pension cost for a year if, as of the beginning of the year, that unrecognized net gain or loss exceeds 10% of the greater of the projected benefit obligation or the market-related value of plan assets. If amortization is required, the amortization is that excess divided by the average remaining service period of participating employees expected to receive benefits under the plan.

Amortization of Prior Service Costs

For determining annual expense amortization of prior service costs resulting from a plan change are included as a component of net periodic pension cost in the year first recognized and every year thereafter until such time as they are fully amortized. The annual amortization payment is determined in the first year as the increase in projected benefit obligation due to the plan change divided by the average remaining service period of participating employees expected to receive benefits under the plan.

Benefits Not Included in Valuation

None.

Changes in Assumptions and Methods

The discount rate was changed from 7.25% to 6.50% for measurement as of December 31, 2002.

The mortality assumption was changed from the 1994 Uninsured Pensioner's Table to the 1994 Group Annuity Reserving Table for males and females; in each case rates are multiplied by .8 for management employees and by 1.2 for union employees.

The interest rate used to determine lump sum payments changed from 6.75% to 6.00%. For lump sum determinations, the mortality table has been changed from the blended 1983 GAM to the 1994 GAR table in effect under Revenue Ruling 2001-62.

Plan

Effective December 31, 1999 the Pension Plan for Employees of Commonwealth Energy System and Subsidiary Companies was merged into the Boston Edison Retirement Plan and the name of the Plan was changed to the NSTAR Pension Plan. The Plan covers eligible employees of participating NSTAR units including management and represented employees. Covered employees include management employees of NSTAR and employees subject to collective bargaining with respect to Locals 369 and 12004.

Prior to the consolidation of locals into Local 369 of the UWUA, the plan also covered represented employees pursuant to bargaining agreements with respect to Local 387 (Boston Edison) and Locals 333, 338, 339, and 392 (Commonwealth Energy). Members of Local 392 receive benefits from this plan as described under the Local 369 bargaining agreement as of October 1, 2000. Members of Local 387 transition to the Local 369 plan provisions effective January 1, 2001. Locals 333, 338, and 339 transition to the Local 369 provisions effective January 1, 2005. All transitions involve certain grandparenting arrangements described in Appendix B2.

The Boston Edison Plan was amended in 1999 to provide special benefits to certain management employees. Participants affected by the merger of BEC Energy and Commonwealth Energy effective August 25, 1999 became 100% vested. Additional benefits became payable under the Plan to management employees who elected to terminate employment under the Voluntary Separation Program.

Effective January 1, 2000, the Plan was amended to provide substantially identical benefits for all eligible management employees under one new benefit formula, subject to certain prior plan minimum guarantees. The benefit formula differs somewhat for management employees who were not eligible employees on August 17, 1999 and for those who were eligible employees on August 17, 1999.

Effective January 1, 1992, the plan sponsor established a 401(h) account to fund retiree health care benefits. The account is available to pay retiree health care benefits on behalf of nonkey employees whose benefits are not provided pursuant to a bargaining agreement.

Eligibility

Non-represented full time employees or part time employees scheduled to work 20 or more hours per week become covered by the plan on the January 1 or July 1 following the earlier of:

- (a) Attainment of age 21 with one year of Eligibility Service,
- (b) Attainment of age 35.

Eligible employees participating in the Boston Edison Retirement Plan as of December 31, 1999 become participants of the plan on January 1, 2000.

Eligible employees participating in the Pension Plan for Employees of Commonwealth Energy System and Subsidiary Companies as of December 31, 1999 become participants of the plan on January 1, 2000.

Service

a. Eligibility Service

One year is earned for the 12 month period beginning with date of hire or any calendar year of employment during which 1,000 hours of service are performed.

b. Benefit Service

One year of Benefit Service is earned for any calendar year during which the Employee is scheduled to work at least 2,080 hours. Partial years of Benefit Service are earned by dividing the number of hours scheduled by 2,080.

Former Boston Edison Plan Participants: Elapsed time based on years and completed months through December 31, 1999.

Former Commonwealth Energy Plan Participants: Calendar years during which Employee works at least 1,000 hours through December 31, 1999.

c. Vesting Service

A year of Vesting Service is earned for any calendar year during which the employee completes at least 1,000 hours of service.

Former Boston Edison Plan Participants:

Calendar years during which an employee completed 1,000 hours through December 31, 1999.

Former Commonwealth Energy Plan Participants: Calendar years during which the Employee completed at least 1,000 hours through December 31, 1999.

Final Average Pay

Highest 3 years average pay of last 10 years, based on July 1 rate plus lump sum merit increases and incentive bonuses during preceding 12 months.

Benefit Formula

Single sum amount equal to Final Average Pay multiplied by the sum of (a) and (b) below is converted to an annuity payable at normal retirement age. Pension credits shall not exceed 525% for participants who were eligible employees on August 17, 1999 and 325% for all others.

For participants who were eligible employees on August 17, 1999:

a. Pension Credits after January 1, 2000

Age on January 1 while working	Annual Credit for years 2000-2004	Annual Credit for years 2005-2014	Annual Credit for years 2015-2019	Annual Credit for years 2020 and later
Under age 25	6%	5%	5%	5%
Ages 25-29	6%	6%	6%	6%
Ages 30-34	7%	7%	7%	7%
Ages 35-39	8%	8%	8%	8%
Age 40	11%	11%	9%	8%
Age 41	12%	11%	9%	8%
Age 42	14%	11%	9%	8%
Age 43	16%	11%	9%	8%
Age 44	18%	11%	9%	8%
Ages 45-49	20%	14%	11%	11%
Ages 50-54	22%	18%	13%	13%
Ages 55 & older	25%	22%	18%	15%

In addition, former Commonwealth Energy Plan participants with age plus service greater than 65 on December 31, 1999 are credited with an additional annual credit of 10% for each year of service from January 1, 2000 through December 31, 2004.

For participants who were not eligible employees on August 17, 1999:

Credits are earned based on the following schedule:

Age on	Annual
<u>January 1</u>	<u>Credit</u>
Under age 25	5%
Ages 25-29	6
30-34	7
35-44	8
45-49	11
50-54	13
55 and older	15%

b. Pension Credits as of January 1, 2000

Former Boston Edison Plan Participants: Based on present value of prior plan employer-provided accrued benefit as of December 31, 1999. Early retirement subsidies based on unreduced annuities after age 60, and 6% per year annual reduction in annuities from age 60 to 55, are included in the value. Pension credits are equal to present value divided by Final Average Pay at December 31, 1999. If greater, pension credits at December 31, 1999 are based on schedule applicable to participants who were not eligible employees on August 17, 1999 as if in effect for prior Benefit Service.

Former Commonwealth Energy Plan Participants: Based on present value of prior plan accrued benefit as of December 31, 1999, including additional temporary annuity benefits earned under the Rule of 75 provisions for Employees satisfying the rule as of December 31, 1999. Early retirement subsidies equal to unreduced annuities after age 60, and 6% per year annual reduction in annuities from age 60 to 55, are included in the value. Pension credits are equal to present value divided by Final Average Pay at December 31, 1999. If greater, pension credits at December 31, 1999 are based on the schedule applicable to participants who were not eligible employees on August 17, 1999 as if in effect for prior Benefit Service.

Present Value Calculation Assumptions:

Interest: 6%

Mortality: The blended 1994 Group Annuity Reserving Table,

weighted 50% for males and 50% for females.

c. Minimum Benefit

In no event will a participant receive an annuity less than the accrued benefit as of December 31, 1999, including early retirement subsidies and optional forms available under prior plan provisions had those provisions remained in effect. The minimum single sum payment is subject to Internal Revenue Code Section 417(e) actuarial assumptions and methodology.

d. Single Sum to Annuity Conversion Assumptions Interest: 5%

Mortality: The blended 1994 Group Annuity Reserving Table,

weighted 50% for males and 50% for females.

Normal Retirement Benefits

a. Eligibility Attainment of age 65.

b. Benefit Single sum amount at termination of employment based on Pension

Credits and Final Average Pay is converted to an annuity at Normal

Retirement.

c. Form of Payment Benefit is normally payable as a life annuity for single participants, or

an actuarially reduced 50% joint and survivor annuity for married participants. Other optional forms, including a lump sum payment

equal to the single sum amount, are available.

d. Single Sum to

Annuity Conversion

Interest: 5%

Mortality: The blended 1994 Group Annuity Reserving Table,

weighted 50% for males and 50% for females.

Early Retirement Benefits

Assumptions

a. Eligibility Attainment of age 55 with 5 years of Vesting Service.

b. Benefit Single sum amount at termination of employment is converted to an

annuity at Normal Retirement Age which is reduced for payment at

early retirement age.

c. Form of Payment Benefit is normally payable as a life annuity for single participants, or

an actuarially reduced 50% joint and survivor annuity for married participants. For participants who were eligible employees on August 17, 1999, annuity conversion factors include an early retirement subsidy based on a 3% per year reduction in the annuity from age 65 to the payment age. Other optional forms, including a

lump sum payment, are available.

Late Retirement Benefits

a. Eligibility Continued employment past Normal Retirement Age.

b. Benefit Single sum amount at Late Retirement converted to an immediate

annuity, but not less than the annuity equivalent of the single sum amount at Normal Retirement increased with 5% annual interest

credited to late retirement date.

c. Form of Payment Same as for Normal Retirement.

Termination of Employment Benefits

a. Eligibility The completion of at least 5 years of Vesting Service. Involuntary

terminations as a result of the merger of BEC Energy and Commonwealth Energy System are 100% vested at termination,

regardless of Vesting Service earned.

b. Benefit Single sum amount at termination of employment converted to an

annuity at Normal Retirement Date.

c. Form of Payment Same as for Normal Retirement.

Death Benefits

a. Eligibility The completion of at least 5 years of Vesting Service.

b. Benefit Single sum amount at date of death.

c. Form of Payment Benefit is payable as a single sum or a five year certain payout for

unmarried participants or as an actuarially equivalent life annuity to

the spouse for married participants.

Minimum for Former Boston Edison Plan Participants: Accrued

benefit as of December 31, 1999 is normally payable as if the

participant elected the 50% joint and survivor annuity option.

Minimum for Former Commonwealth Energy Plan Participants: Accrued benefit as of December 31, 1999 is normally payable as if the participant elected the 50% joint and survivor annuity option. If a participant satisfies the Rule of 75 at date of death, the 50% joint and survivor annuity is unreduced for married participants, and is payable as a five year certain benefit for single participants.

Disability Benefits

a. Eligibility Eligibility for LTD plan benefits from a participating unit.

b. Benefit Single sum amount is based on Final Average Pay and Benefit Service continuing until the earliest of Normal Retirement, date of

retirement, date of recovery, and date of death.

c. Form of Payment Same as for Normal Retirement.

1999 Voluntary Separation Program (VSP)

50% of the VSP amount is payable after the later of termination of employment and January 1, 2000 either as a lump sum or an actuarially equivalent annuity.

Fossil Divestiture

For transferred participants and designated support participants, years of benefit service are frozen at date of transfer, but pay for pension calculation purposes continues until the earlier of termination of employment, death, or May 15, 2000.

Nuclear Divestiture

Participants affected by the sale became 100% vested as of the closing date

Prior Plan Benefits for Boston Edison Plan Participants

- a. Accrued Benefit The monthly benefit is equal to one-twelfth of (1) plus (2) below:
 - (1) Contributory benefit: 1/3 of the sum of all contributions made by the member which have not been withdrawn
 - (2) Noncontributory benefit: (A) plus (B) plus (C) less (D)
 - (A) 2% of Final Average Pay times years of Benefit Service up to 25 years,

- (B) 2.5 % of Final Average Pay times years of Benefit Service in excess of 25 years, up to 30 years,
- (C) .5% of Final Average Pay times years of Benefit Service in excess of 30 years,
- (D) 1 2/3% of Social Security benefit times years of Benefit Service up to 30 years, subject to the maximum offset per Revenue Ruling 71-446.

Prior Plan Benefits for Commonwealth Energy Plan Participants

a. Accrued Benefit

The monthly benefit is equal to one-twelfth of (1) less (2) below, but not less than (3) or (4) below:

- (1) 1-5/6% of average annual compensation, multiplied by years of service to a maximum of 30 years, plus 1% of average annual compensation, multiplied by years of service in excess of 30 years, to a maximum of 5 years.
- (2) .30% of the lesser of average annual compensation, and covered compensation, multiplied by years of service to a maximum of 35 years.
- (3) 1.4% of average annual compensation, multiplied by years of service to a maximum of 30 years, plus 1% of average annual compensation, multiplied by years of service in excess of 30 years, to a maximum of 5 years.
- (4) \$300, multiplied by years of service to a maximum of 40 years.
- b. Covered Compensation

In any year, the average of the Social Security taxable wage base amounts for the preceding 35 years ending with the year of Social Security retirement age.

APPENDIX B2 - SUMMARY OF PLAN PROVISIONS – LOCAL 369

Eligibility

Represented employees become covered by the plan on the earlier of:

- (a) The January 1 or July 1 following attainment of age 21 with one year of Eligibility Service, or
- (b) The January 1 following the earlier of attainment of age 35 and four years of Eligibility Service.

Employees participating in the plan as of December 31, 1999 remain participants of this plan on January 1, 2000.

Former Commonwealth Energy Locals 333, 338 and 339 and Boston Edison Local 387 consolidated into Local 369 effective January 1, 2001. Former Commonwealth Energy Local 392 consolidated into Local 369 effective October 1, 2000. Locals 387 and 392 are eligible for Local 369 benefits described in Appendix B2 as of January 1, 2001 and October 1, 2000, respectively. Locals 333, 338, and 339 are eligible for Local 369 plan benefits described in Appendix B2 as of January 1, 2005. Prior to January 1, 2005, Locals 333, 338, and 339 benefits are as described in Appendix B3.

Service

- a. Eligibility Service
- The 12 month period beginning with date of hire or any calendar year of employment during which 1,000 Hours of Service are performed.
- b. Benefit Service Elapsed

Elapsed time based on years and completed months.

Former Commonwealth Energy Locals Participants: With respect to the accrued benefit as of September 30, 2000 for Local 392 and December 31, 2004 for Locals 333, 338, and 339, a year of Benefit Service is granted for any calendar year during which the participant completes 1,000 hours of service.

c. Vesting Service

A year of Vesting Service is credited for any calendar year during which the participant completes at least 1,000 Hours of Service.

Final Average Pay

Highest consecutive 36 months average base pay of last 10 years.

36

Benefit Formula

- I. The monthly benefit is equal to one-twelfth of (1) plus (2) below:
 - (1) Contributory benefit: 1/3 of the sum of all contributions made by the member which have not been withdrawn
 - (2) Noncontributory benefit : (A) plus (B) plus (C)
 - (A) 1.4% of Final Average Pay times years of Benefit Service up to 15 years,
 - (B) 1.86% of Final Average Pay times years of Benefit Service in excess of 15 years, up to 30 years,
 - (C) .65% of Final Average Pay times years of Benefit Service in excess of 30 years.

For Local 369 or 387 employees as of December 31, 2000, a minimum monthly noncontributory benefit based on pay and service through May 1, 1990 is equal to one-twelfth of the greatest of (1), (2), and (3) below:

- (1) 60% of Final Average Pay (excluding overtime) less 50% of the primary Social Security benefit, both reduced by .2083% for each month that benefit service is less than 30 years,
- (2) The accrued benefit under the Career Average Pay formula as of May 15, 1986,
- (3) \$1,200 for participants with at least 10 years of vesting service at Normal Retirement.
- II. For Local 387 employees as of December 31, 2000, a minimum benefit based on pay and service through December 31, 2000 is equal to one-twelfth of (1) plus (2) below:
 - (1) Contributory benefit: 1/3 of the sum of all contributions made by the member which have not been withdrawn
 - (2) Noncontributory benefit: (A) plus (B) plus (C)
 - (A) 1.44% of Final Average Pay times years of Benefit Service up to 15 years,
 - (B) 1.92% of Final Average Pay times years of Benefit Service in excess of 15 years, up to 30 years,
 - (C) .85% of Final Average Pay times years of Benefit Service in excess of 30 years.

- III. For Local 392 employees as of September 30, 2000, a minimum benefit based on pay and service through September 30, 2000 is equal to one-twelfth of (1) plus (2) less (3) below, but not less than (4) or (5):
 - (1) 1-5/6% of Final Average Annual Compensation times years of Benefit Service up to 30 years,
 - (2) 1% of Average Annual Compensation times years of Benefit Service in excess of 30 years, up to 35 years,
 - (3) .60% of the lesser of Average Annual Compensation and covered compensation times years of Benefit Service to a maximum of 35 years. The .60% factor is replaced by .55% for those born during 1938 through 1954 and by .50% for those born during and after 1955,
 - (4) 1.4% of Average Annual Compensation, multiplied by years of Benefit Service up to 30 years, plus 1% of Average Annual Compensation multiplied by years of Benefit Service in excess of 30 years, up to 35 years,
 - (5) \$300 multiplied by years of Benefit Service to a maximum of 40 years.

Normal Retirement Benefits

a. Eligibility Attainment of age 65.

b. Benefit Accrued benefit at Normal Retirement.

c. Form of Payment Accrued benefit is normally payable as a life annuity for single participants, or an actuarially reduced 50% joint and survivor annuity for married participants. A minimum payout on death is applicable to employee contributions with interest.

Employees who were Local 387 employees hired before May 15, 1994 and Local 369 employees prior to the consolidations are eligible for lump sum payments with respect to accrued benefits under the Local 369 or 387 formulas as applicable, as of December 31, 2000. Employees who were Local 369 employees on May 15, 2000 who become eligible for an unreduced pension prior to May 15, 2005 retain the rights for a lump sum benefit.

Early Retirement Benefits

a. Eligibility The earliest of (1), (2), (3), and (4):

- (1) Age 62 for employees hired before May 15, 1986. Age 62 with 10 years of benefit service for employees hired on or after May 15, 1986.
- (2) Age 55 with 20 years of benefit service.
- (3) Sum of attained age and completed years of benefit service at least 85,
- (4) Age 45 with 20 years of Benefit Service and either resigning for cause or being discharged for reasons not the fault of participant.

Employees of Local 392 as of September 30, 2000 may retire at age 55 or later with the sum of age and years of Vesting Service of at least 75.

b. Benefit

Accrued benefit at Early Retirement reduced for early commencement. \$100 minimum monthly benefit does not apply for Early Retirement.

c. Early Retirement Reduction

Benefits are reduced for early commencement based upon the factors below. However, the factor equals 1.000 regardless of age after completing 40 years of Vesting Service or at age 57 with 35 years of Vesting Service.

Full Years Prior to NRD	Early Retirement <u>Factor</u>		
1 to 5	1.000		
6	.925		
7	.850		
8	.775		
9	.700		
10	.625		
11	.457		
12	.430		
13	.404		
14	.382		
15	.360		
16	.340		
17	.321		
18	.304		
19	.288		
20	.272		

Employees of Local 392 can receive the accrued benefit as of September 30, 2000, unreduced for early commencement, if age 55 with age plus Vesting Service at retirement equal to or exceeding 75.

Employees of Local 387 as of December 31, 2000 may receive their benefit earned through December 31, 2000, reduced 6% per year from age 60 to age 55.

d. Form of Payment Same as for Normal Retirement.

e. Temporary
Supplement for
Early Retirement

Monthly amount payable as a temporary life annuity until age 62 to retirees ages 57 through 61 with 35 or more years of service equal to \$10 times years of benefit service.

Employees of Local 387 as of December 31, 2000 with at least 33 years of Benefit Service may receive a temporary life annuity to the later of age 62 and eligibility for 80% Social Security benefit equal to \$11 times years of Benefit Service.

Employees of Local 392 may receive a temporary 50% joint and survivor annuity supplement equal to the amount defined in Section III(3) of *Benefit Formula* of Appendix B2. This benefit is available only if the employee has elected to receive benefits described under Section III *Benefit Formula* in Appendix B2.

Late Retirement Benefits

a. Eligibility A participant may continue to work beyond Normal Retirement Age.

b. Benefit Accrued benefit at Late Retirement.

c. Form of Payment Same as for Normal Retirement.

Termination of Employment Benefits

a. Eligibility The completion of at least 5 years of Vesting Service.

b. Benefit Accrued benefit at termination, without regard to \$100 monthly

minimum benefit. The noncontributory monthly benefit is subject to a minimum of \$3 multiplied by Benefit Service, not to exceed 33-1/3

years.

c. Form of Payment Same as for Normal Retirement.

Pre-Retirement Spouse Benefits

a. Eligibility Married twelve months and either age 55 or the completion of at least

10 years of Benefit Service.

b. Benefit 50% of the participant's noncontributory and contributory benefit

based on the Normal Retirement benefit formula and Final Average

Pay and years of Benefit Service as of the date of death.

c. Form of Payment Benefit is normally payable as a life annuity to the spouse.

Pre-Retirement Death Benefits

a. Eligibility Married twelve months with 5 years of Vesting Service and not

eligible for pre-retirement spouse benefits. If not eligible for married death benefit, a minimum benefit of return of employee contributions

with interest is payable to a beneficiary.

b. Benefit 50% of 50% joint and survivor annuity based on accrued benefit

determined based on Final Average Pay and years of Benefit Service at

the date of death.

Employees of Local 392 as of September 30, 2000, receiving benefits based on the amounts described in Section III of *Benefit Formula* in this Appendix, are entitled to receive 50% of the accrued benefit at date of death, if age plus Vesting Service equals or exceeds 75 and

married. If single, a five year certain benefit is payable.

c. Form of Payment Benefit is normally payable as a life annuity to the Spouse. Other

optional forms are available, including lump sum payments.

Disability Benefits

a. Eligibility Disability following 15 years of Benefit Service, and receiving Social

Security disability benefits or certified as unable to perform a

company job.

b. Benefit Accrued benefit as of date of disability, payable immediately without

reduction.

c. Form of Payment Same as for Normal Retirement.

Employee Contributions Each member who was contributing to the Plan on May 1, 1980 and

continued to contribute an annual amount equal to 3.75% of base pay in excess of \$6,600 became eligible for an annual contributory

benefit equal to 1/3 of total contributions.

For transferred participants and designated support participants,

years of Benefit Service are frozen at date of transfer, but pay for pension calculation purposes continues until the earlier of

termination of employment, death, or May 15, 2000.

Nuclear Divestiture Participants affected by the sale became 100% vested as of the

closing date.

APPENDIX B3 - SUMMARY OF PLAN PROVISIONS – FORMER COMMONWEALTH ENERGY LOCALS LOCAL 12004

Eligibility

Age 21 and completion of one year of service.

Former Commonwealth Energy Locals 333, 338, and 339 are eligible for benefits described in this Appendix through December 31, 2004.

Service

a. Eligibility Service

The 12 month period beginning with date of hire or any calendar year of employment during which 1,000 hours of service are performed.

b. Benefit Service

A year of Benefit Service is granted for any calendar year during which the participant completes 1,000 hours of service.

c. Vesting Service

A year of Vesting Service is granted for any calendar year during which the participant completes at least 1,000 hours of service.

Benefit Formula

The monthly benefit is equal to one-twelfth of (1) plus (2) less (3) below, but not less than (4) or (5) below:

- (1) 1-5/6% of Final Average Annual Compensation times years of Benefit Service up to 30 years,
- (2) 1% of Average Annual Compensation times years of Benefit Service in excess of 30 years, up to 35 years,
- (3) .60% of the lesser of Average Annual Compensation and covered compensation times years of Benefit Service to a maximum of 35 years. The .60% factor is replaced by .55% for those born during 1938 through 1954 and by .50% for those born during and after 1955. The .60% factor is replaced by .30% for all participants who are members of Local 12004.
- (4) 1.4% of Average Annual Compensation, multiplied by years of Benefit Service up to 30 years, plus 1% of Average Annual Compensation multiplied by years of Benefit Service in excess of 30 years, up to 35 years,
- (3) \$300 multiplied by years of Benefit Service to a maximum of 40 years.

APPENDIX B3 - SUMMARY OF PLAN PROVISIONS – FORMER COMMONWEALTH ENERGY LOCALS LOCAL 12004 (cont.)

Normal Retirement Benefits

a. Eligibility Age 65, or if later, the 5th anniversary of the date of plan participation.

b. Benefit Accrued benefit at Normal Retirement.

c. Form of Payment Accrued benefit is normally payable as a life annuity for single

participants or an actuarially reduced 50% joint and survivor annuity for married participants. The 50% joint and survivor annuity is unreduced for a married participant if the sum of the participant's age

and years of service is 75 or greater.

Early Retirement Benefits

a. Eligibility Age 55 or later with the sum of age and years of Vesting Service at

least 75.

b. Benefit Accrued benefit at Early Retirement. The benefit is not reduced for

early commencement.

c. Form of Payment Same as for Normal Retirement.

Late Retirement Benefits

a. Eligibility A participant may continue to work beyond Normal Retirement Age.

b. Benefit Accrued benefit at Late Retirement but not less than pension payable

at age 65.

c. Form of Payment Same as for Normal Retirement.

Termination of Employment Benefits

a. Eligibility 5 years of Vesting Service.

b. Benefit Accrued benefit at termination. Benefit is reduced on an actuarial

equivalence basis for payment at or after age 55 but before Normal

Retirement.

c. Form of Payment Same as for Normal Retirement.

APPENDIX B3 - SUMMARY OF PLAN PROVISIONS – FORMER COMMONWEALTH ENERGY LOCALS LOCAL 12004 (cont.)

Regular Pre-Retirement Death Benefits

a. Eligibility 5 years of Vesting Service.

b. Benefit 50% of accrued benefit reduced as applicable for early payment and

for 50% joint and survivor annuity.

c. Form of Payment Benefit is normally payable as a life annuity to the Spouse. Other

optional forms are available, including lump sum payments.

Special Pre-Retirement Death Benefits

a. Eligibility Age 55 and the completion of at least 10 years of Vesting Service.

b. Benefit 50% of accrued benefit unreduced for early payment but reduced for

50% joint and survivor annuity for married participants. A five year

certain benefit is payable for single participants.

GLOSSARY

Accumulated Benefit Obligation

This is the same as the Projected Benefit Obligation except that it is based on current and past compensation levels instead of future compensation levels.

Actuarial Gain or Loss

From one plan year to the next, if the experience of the plan differs from that anticipated using the actuarial assumptions, an actuarial gain or loss occurs. For example, an actuarial gain would occur if the assets in the trust earned 12% for the year while the assumed rate of return used in the valuation was 8%.

Additional Minimum Liability

If a plan has a minimum liability, the sponsor may be required to post a liability on the balance sheet in addition to the accrued/(prepaid) benefit cost already recorded. If the Accumulated Benefit Obligation exceeds the fair value of assets, the plan has a minimum liability equal to the excess. If there is a minimum liability and it exceeds the Accrued/(Prepaid) Benefit Cost, the difference is called the Additional Minimum Liability and the accrued benefit liability equals the minimum liability.

Funded Status

This is the excess/(shortfall) of the fair value of plan assets over the Projected Benefit Obligation.

Prepaid/(Accrued) Benefit Cost

The sponsor's balance sheet asset/(liability) entry, the net recognized amount, is the sum of the cumulative excess of contributions to the plan over net periodic benefit costs and other plan-related charges to income due either to business combination or accelerated recognition pursuant to SFAS 88. The difference between this account and the Funded Status is the unrecognized net loss/(gain) and prior service costs.

Projected Benefit Obligation

Computed in accordance with SFAS 87, this quantity is the actuarial present value of all benefits attributed by the plan's benefit formula to service rendered prior to the measurement date. It is measured using an assumption as to future compensation levels when the benefit formula is based on future compensation levels.

GLOSSARY (cont.)

Service Cost

Computed in accordance with SFAS 87, this component of the net periodic benefit cost is the actuarial present value of benefits attributed by the plan's benefit formula to services rendered by employees during the period over which the net periodic benefit cost is incurred. It is measured using an assumption as to future compensation levels when the benefit formula is based on those future compensation levels.

D.T.E. 03-47

Information Request: DTE-2-9

June 5, 2003

Person Responsible: James J. Judge

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<u>Information Request DTE-2-9</u>

Refer to Exh. NSTAR-JJJ-1(A) at 14. Are the Accumulated Benefit Obligation for Pensions and PBOP and the corresponding Asset values adjusted for capitalization? Please explain how the \$257 million Prepaid Regulatory Asset figure on page 15 is represented in the Accumulated Benefit Obligation for Pensions and PBOP and the corresponding Asset values on page 14.

Response

The Accumulated Benefit Obligation ("ABO") and asset values shown on page 14 of Exhibit NSTAR-JJJ are not reduced for capitalization. The ABO and asset value are indicative of the funded status of the Plan as a whole. As pension costs are recognized under SFAS 87, they will either be collected from customers currently (O&M portion) or through future depreciation expense (capital portion).

The \$257 million prepaid regulatory asset reflected on page 15 is not calculated based on the ABO and asset balances. This amount reflects the cumulative excess of cash contributions over the pension costs since the adoption of SFAS 87. NSTAR was required to reclassify this amount to a regulatory asset account at December 31, 2002. At such time that the assets exceed the ABO, this amount will be reclassified as prepaid pension.

D.T.E. 03-47

Information Request: DTE-2-10

June 5, 2003

Person Responsible: James J. Judge

Page 1 of 1

Information Request DTE-2-10

Please refer to Exh. NSTAR-JJJ-1(A) at 32, line 6. What specific items are included in the deferral account?

Response

The deferral account will have a beginning balance as of January 1, 2003 of \$4.2 million for Boston Edison reflecting a pension deferral ordered in D.P.U./D.T.E. 92-92; and \$3.7 million for Cambridge reflecting a PBOP phase-in deferral ordered in D.P.U./D.T.E. 92-250.

Each year, NSTAR will record in the deferral account the difference between the current year's actual Pension/PBOP expense and the amount recovered in base rates plus the Pension/PBOP Adjustment Mechanism ("PAM") revenues. The deferral account will also include cumulative deferral amortization. In addition, the Company will calculate the carrying charge, which is added to the balance.

D.T.E. 03-47

Information Request: DTE-2-11

June 5, 2003

Person Responsible: James J. Judge

Page 1 of 1

Information Request DTE-2-11

Please refer to Exh. NSTAR-JJJ-1(A) at 32. Assuming the Company were permitted to implement its proposal this year, what would be the initial balance of the deferral account to be amortized over a three-year period?

Response

As explained in the response to Information Request DTE-2-10, the initial balance as of January 1, 2003 will be \$7.9 million as shown on Attachment DTE-1-4(Rev), page 1, line 7. The projected balance as of December 31, 2003 is \$34.9 million as shown on line 10 of that attachment. Therefore, the initial balance to be amortized over a rolling three-year period is estimated to be \$34.9 million.

D.T.E. 03-47

Information Request: DTE-2-12

June 5, 2003

Person Responsible: James J. Judge

Page 1 of 1

Information Request DTE-2-12

Refer to Exh. NSTAR-JJJ at 30. Please provide the projected revenue impact of the annual pension/PBOP adjustment factor for the first three years of operation.

Response

Please refer to the Company's response to Information Request DTE-1-4(Rev), Pages 1 and 2, line 23 for the projected revenue impact in 2004 and 2005, respectively. Please refer to Attachment DTE-2-12, line 23 for the projected revenue impact in 2006. These amounts are based on NSTAR's current estimates of expenses that are highly variable, therefore this information is provided for illustrative purposes and the actual revenue impact will be different from this forecast. Also, these amounts are for the annual Pension/PBOP Adjustment Factor alone and do not account for the impact to total revenue in consideration of the 15 percent rate reduction for the electric companies (see the response to Information Response DTE-2-3).

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2006 Example Pension Adjustment Factor Calculation (\$'s in millions)

Line	Description	Boston Edison	Cambridge Electric	Commonwealth Electric	NSTAR Gas	Description
	Col. A	Col. B	Col. C	Col. D	Col. E	Col. F
1	2001 Non-Capitalized Pension & PBOP Contributions	\$ 50.228	\$ 2.571	\$ 13.902	\$ 12.687	
2	2002 Non-Capitalized Pension & PBOP Contributions	40.743	2.004	11.355	12.023	
3	2003 Non-Capitalized Pension & PBOP Contributions	54.214	2.666	15.109	15.998	
4	2001 - 2003 Average Pension & PBOP Contributions	48.395	2.414	13.455	13.569	(Line 1 + Line 2 + Line 3) / 3
5	less: Pension & PBOP Expense Currently in Rates	24.031	1.207	7.371	4.818	Exhibit NSTAR-JJJ-4(REV), Col. D
6	Average Differential Amount	24.364	1.207	6.084	8.751	Line 4 - Line 5
7	Unamortized Reconciliation Deferral at 12/31/2004	3.286	2.440	(0.201)	0.271	The 10 Committee City
			2.449	(0.281)		Line 10 from prior year filing
8	2005 Reconciliation Deferral (Accrual)	(13.006)	(0.674)	(3.593)	•	SFAS 87/106 est. expense - Line 4
9	2005 Reconciliation Adjustment	1.095	0.816	(0.094)		Line 11 from prior year
10	Unamortized Reconciliation Deferral at 12/31/2005	(10.815)	0.959	(3.780)		Line 7 + Line 8 - Line 9
. 11	Reconciliation Adjustment For 2006	(3.605)	0.320	(1.260)	(0.515)	(Line 10) / 3
	D	44- 44-				
12	Pension and PBOP Prepaid at 12/31/2004	127.029	6.247	35.401	37.484	
13	Pension & PBOP Prepaid at 12/31/2005	114.004	5.607	31.772	33.641	
14	2005 Average Pension & PBOP Prepaid	120.517	5.927	33.587		(Line $12 + \text{Line } 13$) / 2
15	Unamortized Reconciliation Deferral at 12/31/2005	(10.815)	0.959	(3.780)	` ,	Line 10
16	Deferred Tax Amount	(44.766)	(3.099)	(12.006)	(13.759)	
17	Balance Subject to Carrying Charge	64.936	3.787	17.801	20.259	Line 14 + Line 15 + Line 16
18	Cost of Capital Factor	10.88%	12.70%	13.49%	15.53%	
19	Carrying Charge Amount	7.065	0.481	2.401	3.146	Line 17 * Line 18
20	2005 Actual Pension/PBOP Adjustment Amount	36.028	2.687	9.208	14.186	Line 22 mion vecanture un
21	less: 2005 Actual Pension/PBOP Adjustment Revenue	35.584	2.354	9.208	13.964	Line 23 prior year true-up Example Data
22	Past Period Reconciliation Amount	0.444	0.333	0.111	0.222	Line 20 - Line 21
1			0.555		0.222	Director Director
23	Forecasted 2006 Pension/PBOP Adjustment Amount	28.268	2.341	7.336	11.604	Line 6 + Line 11 + Line 19 + Line 22
24	Forecasted 2006 gWh (Mil. Therms for NSTAR Gas)	15,566	1,674	4,237	478	
		1.2				
25	2006 Pension/PBOP Adjustment Factor	0.00182	0.00140	0.00173	0.0243	(Line 23) / (Line 24)

D.T.E. 03-47

Information Request: DTE-2-13

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-13

Refer to Exh. NSTAR-JJJ at 9. Does the Company maintain a supplemental executive retirement plan (SERP). If the response is affirmative, please provide the amount of FAS 87 pension expense for the years 2001-2003 attributable to the operation of this plan.

Response

Yes, in addition to the NSTAR Pension Plan, the Company also maintains a Nonqualified Pension Plan. The Company's total SFAS 87 cost includes both the qualified and nonqualified plans. However, the costs related to the nonqualified plan are not included within the scope of this tariff proposal and therefore SFAS 87 cost and expense amounts provided by the Company in this proceeding do not include amounts related to the nonqualified plan. Similarly, the amount included in rates excludes the non-qualified expenses.

The costs relating to this plan for 2001-2003 are:

2001	\$3,318,000
2002	\$3,525,000

\$4,066,000 (estimated, because final actuarial evaluation is

not yet complete).

D.T.E. 03-47

Information Request: DTE-2-16

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-16

Refer to Exh. NSTAR-JJJ at 33. Assuming the Company's proposed pension/PBOP adjustment mechanism is adopted, would NSTAR increase its common dividend payout to compensate shareholders for the use of equity funds used to pre fund the Company's pension plan?

Response

No, NSTAR would not increase its dividend as a direct result of the pension/PBOP adjustment mechanism being adopted. NSTAR's common dividend level is based on a number of factors including, but not limited to; ability to pay (i.e., free cash flow available), long-term payout ratio, payout ratio and yield of other companies, long-term earnings growth, and financial covenants. The dividend payout is considered by the market to be a long-term indicator of future corporate performance and the Company's pension proposal is only one of the ways of solving the pension recovery issue. NSTAR considers the Company's proposal to be a reasonable method of resolving the pension/PBOP-recovery issue equitably and in a manner that addresses the key issues.

D.T.E. 03-47

Information Request: DTE-2-18

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-18

Refer to the response to DTE 1-2, at 1. Please explain the pension expense gross-up factor and the PBOP expense gross-up factor appearing on lines 9 and 19 respectively.

Response

Page one of Attachment DTE-1-2(Rev) summarizes the data that appears on the following pages for each of the NSTAR retail utility companies. As such, the gross-up factor on line 9 represents a weighted average for all four companies and is determined by dividing line 10 by line 8. Similarly, line 19 is determined by dividing line 20 by line 18.

For the individual retail utilities shown on pages 2-5 of the attachment, the gross-up factor on lines 9 and 19 represents the capitalization rate in the test year used in each company's base rate case that set the retail rates in the subject years. The Pension and PBOP expense is the actual test year amount of SFAS 87/106 cost included in Account 926 – Employee Pensions and Benefits. The Pension and PBOP cost represents the total SFAS 87/106 cost in the test year, and is equal to the SFAS 87 expense divided by the gross-up factor.

D.T.E. 03-47

Information Request: DTE-2-20

June 5, 2003

Person Responsible: James J. Judge

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Information Request DTE-2-20

Refer to the response to DTE 1-4, at 1. Does the Company's calculation of the carrying charge amount on line 19 account for the revenues collected during the year through the Reconciliation Adjustment shown on line 11?

Response

180

Attachment DTE 1-4(Rev), Page 1 is a projection of the year 2004, and therefore the calculation of carrying charges on the deferral is based solely on the projected ending 2003 deferral since there will have been no PAM revenues in 2003. In future years, as illustrated on Page 2 of the attachment, the actual PAM revenues collected in the prior year are accounted for in determining the Reconciliation Adjustment and thus impact the carrying charge calculation.

D.T.E. 03-47

Information Request: **DTE-2-23**

June 5, 2003

Person Responsible: James J. Judge

Page 1 of 1

Information Request DTE-2-23

Refer to the response to DTE-1-6. Please explain why the reconciliation deferral is not calculated on a forward looking basis, i.e. based upon the amount collected in rates after the Pension/PBOP adjustment mechanism is adopted.

Response

In December 2002, the Department approved in D.T.E. 02-78 the Company's request to defer, and record as a regulatory asset or liability, the difference between the level of pension and PBOP expenses that are included in rates and the amounts that must be booked in accordance with SFAS 87 and SFAS 106. As of January 2003, the Company began to defer amounts and record a regulatory asset in accordance with that approval.

The Reconciliation Deferral calculation in the Pension/PBOP Adjustment Mechanism is a continuation of, and consistent with the accounting practice approved and established in D.T.E. 02-78. That is, it is designed to recover the entire regulatory asset, which has been accumulating since January 1, 2003.

Unless the Reconciliation Deferral is calculated in such a way as to include the amounts deferred starting from January 1, 2003, the Company will have to write off the balance of the associated regulatory asset. The Company estimates that as of December 2003, the regulatory asset related to the SFAS 87 and SFAS 106 deferral will be approximately \$27 million dollars.